



*Handwritten initials*

PTO/SB/21 (09-04)  
Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/805,638	
	Filing Date	March 19, 2004	
	First Named Inventor	Donald J. Lewis	
	Art Unit		
	Examiner Name		
Total Number of Pages in This Submission	21	Attorney Docket Number	81100234

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input checked="" type="checkbox"/> Information Disclosure Statement - PTO/SB/08 (5 pages) - Copy of Nonpatent Reference	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Reply to Missing Parts/ Incomplete Application	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<b>Remarks</b>	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	Alleman Hall McCoy Russell & Tuttle LLP		
Signature	<i>Christopher S. Tuttle</i>		
Printed name	Christopher S. Tuttle		
Date	August 24, 2005	Reg. No.	41,357

CERTIFICATE OF TRANSMISSION/MAILING	
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:	
Signature	<i>Lauren Barberena</i>
Typed or printed name	Lauren Barberena
Date	August 24, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Application of:

August 24, 2005

DONALD J. LEWIS, JOHN O. MICHELINI,  
MICHAEL J. CULLEN, and JOHN D. RUSSELL

Serial No. : 10/805,638

Group Art Unit:

Filed : March 19, 2004

For : ELECTROMAGNETIC VALVE CONTROL IN AN INTERNAL  
COMBUSTION ENGINE WITH AN ASYMMETRIC EXHAUST  
SYSTEM DESIGN

Mail Stop AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §§ 1.56, 1.97, 1.98**


In compliance with the duty of disclosure under 37 C.F.R. §§ 1.56, 1.97, and 1.98, the following patents, publications, applications, and/or other information are being submitted and disclosed to the Office, including those listed on the enclosed Form PTO-1449, for consideration by the Examiner.

Applicants respectfully request that the disclosed information be made of record and expressly considered by the Examiner during examination of the pending application. Further, Applicants respectfully request that the disclosed items be listed on the face of any patent issuing from the pending application in the "references cited" column.

In accordance with 37 C.F.R. § 1.97 (g), the present information disclosure statement is not a representation that a search has been made.

In accordance with 37 C.F.R. § 1.97 (h), the present information disclosure statement is not an admission that the information cited in the statement is, or is considered to be, material to patentability.

In accordance with MPEP § 609, Applicants respectfully request that if the present application is a continuing application, all information considered by the Office in the parent application be considered in the present application, although it need not be listed on the face

 of the patent unless resubmitted in this or another information disclosure statement filed in this application.

Finally, the present information disclosure statement is not an admission that the information cited in the statement is, or is considered to be, prior art.

**BASIS FOR CONSIDERATION BY THE OFFICE UNDER 37 C.F.R. § 1.97**

☒ **37 C.F.R. § 1.97(b)**

The present information disclosure statement is being filed, to the best of Applicants' knowledge and belief:

- (1) within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d); or
- (2) within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application; or
- (3) before the mailing of a first Office action on the merits; or
- (4) before the mailing of a first Office action after the filing of a request for continued examination under 37 C.F.R. § 1.114.

**CONTENT OF INFORMATION DISCLOSURE STATEMENT 37 C.F.R. § 1.98**

The present information disclosure statement includes any information noted above, along with a Form PTO-1449 (5 pages).

If applicable, a legible copy of the following is being included:

- (1) Each publication (identified by published, author (if any), title, relevant pages of the publication, date, and place of publication).


If there are any questions regarding this submission, please contact the undersigned.

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, to: Mail Stop AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on August 24, 2005.

  
Lauren Barberena

Respectfully submitted,  
ALLEMAN HALL MCCOY RUSSELL &  
TUTTLE LLP

  
Christopher S. Tuttle  
Registration No. 41,357  
Customer No. 36865  
Attorney for Applicant  
806 SW Broadway, Suite 600  
Portland, Oregon 97205  
Telephone: (503) 459-4141  
Facsimile: (503) 459-4142



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 5

**Complete if Known**

Application Number	10/805,638
Filing Date	March 19, 2004
First Named Inventor	Donald J. Lewis
Art Unit	
Examiner Name	
Attorney Docket Number	81100234

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 3828247	08-06-1974	Kirsch et al.	
		US- 3865088	02-11-1975	Links	
		US- 4009695	03-01-1977	Ule	
		US- 4976228	12-11-1990	Kawamura	
		US- 4990854	02-05-1991	Friz	
		US- 5117790	06-02-1992	Clarke et al.	
		US- 5190013	03-02-1993	Dozier	
		US- 5408958	04-25-1995	Esch et al.	
		US- 5442515	08-15-1995	Wallaert	
		US- 5596956	01-28-1997	Ogawa et al.	
		US- 5617829	04-08-1997	Bidner et al.	
		US- 5636601	06-10-1997	Moriya et al.	
		US- 5930992	08-03-1999	Esch et al.	
		US- 5934231	08-10-1999	Schmitz et al.	
		US- 5957095	09-28-1999	Kako	
		US- 5992153	11-30-1999	Tsuchihashi et al.	
		US- 6050231	04-18-2000	Tisch et al.	
		US- 6062186	05-16-2000	Barnes et al.	
		US- 6109225	08-29-2000	Ogita et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> *Number <sup>4</sup> *Kind Code <sup>5</sup> (if known)				

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/805,638
Filing Date	March 19, 2004
First Named Inventor	Donald J. Lewis
Art Unit	
Examiner Name	
Attorney Docket Number	81100234

Sheet **2** of **5****U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 6178934	01-30-2001	Hirasawa et al.	
		US- 6192857	02-27-2001	Shimada	
		US- 6202608	03-20-2001	Yamaki et al.	
		US- 6216652	04-17-2001	Gramann et al.	
		US- 6332445	12-25-2001	Voss et al.	
		US- 6333843	12-25-2001	Boie et al.	
		US- 6363907	04-02-2002	Arai et al.	
		US- 6367437	04-09-2002	Nakamura et al.	
		US- 6374783	04-23-2002	Toriumi	
		US- 6382193	05-07-2002	Boyer et al.	
		US- 6389806	05-21-2002	Glugla et al.	
		US- 6390038	05-21-2002	Di Lieto et al.	
		US- 6397813	06-04-2002	Han et al.	
		US- 6401684	06-11-2002	Hori et al.	
		US- 6415601	07-09-2002	Glugla et al.	
		US- 6422185	07-23-2002	Duesmann et al.	
		US- 6460500	10-08-2002	Ooyama et al.	
		US- 6505113	01-07-2003	Eichenseher et al.	
		US- 6526745	03-04-2003	Ogiso	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet **3** of **5****Complete if Known**

Application Number	10/805,638
Filing Date	March 19, 2004
First Named Inventor	Donald J. Lewis
Art Unit	
Examiner Name	
Attorney Docket Number	81100234

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 6546910	04-15-2003	Tanaka et al.	
		US- 6550240	04-22-2003	Kolmanovsky et al.	
		US- 6553961	04-29-2003	Hammoud et al.	
		US- 6619245	09-16-2003	Fujiwara et al.	
		US- 6637386	10-28-2003	Murata et al.	
		US- 6647947	11-18-2003	Boyer et al.	
		US- 6681173	01-20-2004	Turner et al.	
		US- 6718928	04-13-2004	Brueggen et al.	
		US- 6736121	05-18-2004	Gopichandra	
		US- 6763707	07-20-2004	Kumagai et al.	
		US- 6766641	07-27-2004	Surnilla et al.	
		US- 6772723	08-10-2004	Aoki et al.	
		US- 6785603	08-31-2004	Inoue	
		US- 2002/0038541	04-04-2002	Surnilla et al.	
		US- 2002/0157630	10-31-2002	Gerhard et al.	
		US- 2003/0051465	03-20-2003	Kolmanovsky et al.	
		US- 2003/0106515	06-12-2003	Kondo	
		US- 2004/0083719	05-06-2004	Xu et al.	
		US- 2004/0103867	06-03-2004	Hayase et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	† <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(Use as many sheets as necessary)*

**Complete if Known**

Application Number	10/805,638
Filing Date	March 19, 2004
First Named Inventor	Donald J. Lewis
Art Unit	
Examiner Name	
Attorney Docket Number	81100234

Sheet	4	of	5
-------	---	----	---

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE  STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/805,638
				Filing Date	March 19, 2004
				First Named Inventor	Donald J. Lewis
				Art Unit	7
				Examiner Name	
Sheet	5	of	5	Attorney Docket Number	81100234

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		KLUTING, FLIERL, GRUDNO and LUTTERMANN; MTZ Magazine, August 1999, "Drosselfreie Laststeuerung mit vollvariablen Ventiltrieben"	✓

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.  
<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.  
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:  
Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.